

PRELIMINARY AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims

1 Claim 1 (Currently amended). A protection barrier comprising:

2 an elongated barrier defining a chamber therein, said barrier having first and
3 second side walls, a base and a top surface, each of said first and second side walls
4 including a plurality of non-vertical wall segments disposed thereon;

5 a guide channel being inwardly curved and carried by each of said first and
6 second side walls, said guide channel being positioned in horizontal alignment with
7 similar sized ~~guides~~ guide channels on like-configured barriers; and

8 a coupling disposed on each opposed first and second end of said barrier, said
9 coupling for connecting juxtaposed end-to-end arrangement of like-configured
10 barriers, said coupling including:

11 a tongue extended from each opposed first and second end of said
12 barrier, said tongue extending vertically between said base and said top
13 surface of said barrier, said tongue extended from an off-center portion of
14 each end;

15 a groove indentation in each opposed first and second end and
16 extending vertically between said base and said top surface of said

17 barrier, said groove having a mirror-image configuration of said tongue,
18 said groove and tongue having one contiguous surface; and
19 each opposed first and second end of said barrier having beveled corners
20 providing for pivotable movement of said tongue of a first barrier end when releasably
21 inserted within a second groove indentation of either end of a like-configured second
22 barrier thereby forming an end-to-end aligned and nesting relationship of a plurality of
23 like-configured barriers.

1 Claim 2 (Canceled).

1 Claim 3 (Currently amended) The protection barrier of Claim 2- 1wherein said
2 guide channel including:

3 a said guide channel bounded horizontal by two adjacent wall segments of ~~said~~
4 a plurality of non-vertical wall segments, said guide channel horizontally aligned with
5 ~~each opening through each buttress~~ on each of said first and second side walls; and

6 a tube removably extended through said guide channel ~~and through each~~
7 ~~opening through each buttress~~;

8 whereby upon an impact of a vehicle with one of said first or second side walls,
9 said tube and guide channel are impacted with resulting destruction of said tube
10 within said guide channel and with resulting distribution of impact energy along said
11 guide channel and said two adjacent wall segments of said first and second side walls.

1 Claim 4 (Currently amended). The protection barrier of Claim 1 further comprising:

2 ~~said barrier having a base, a top surface and first and second ends, said~~
3 chamber is extended in said barrier between said base, said top surface and said first
4 and second ends;

5 said first and second side walls each including said plurality of non-vertical wall
6 segments being disposed between said base and said top surface;

7 ~~said first and second ends having beveled corners;~~

8 said guide channel including an upper guide channel aligned parallel with a
9 lower guide channel, said upper and lower guide channels are each inwardly curved
10 and spaced apart horizontally between an upper wall sloped segment and a lower wall
11 sloped segment of said plurality of non-vertical wall segments; ~~and~~

12 ~~a plurality of buttresses positioned vertically at spaced apart locations along~~
13 ~~said first and second side walls; each of said plurality of buttresses having an upper~~
14 ~~opening and a lower opening therethrough, said upper opening of each buttress being~~
15 ~~aligned with said upper guide channel, said lower opening of each buttress being~~
16 ~~aligned with said lower guide channel~~

17 a first channel edge extended horizontally along said upper wall sloped
18 segment, said first channel edge providing an upper boundary of said inwardly curved
19 upper guide channel; and

20 a second channel edge extended horizontally along said lower wall sloped
21 segment, said second channel edge providing an upper boundary of said inwardly
22 curved lower guide channel;

23 at least one cable extended horizontally within one of said upper guide channel
24 and said lower guide channel, said at least one cable extended between respective
25 aligned channels of end-to-end aligned and nested like-configured barriers.

1 Claim 5 (Currently amended). The protection barrier of Claim 4 wherein said upper
2 and lower guide channels including:

3 an upper tube removably extended through said upper guide channel, ~~and~~
4 ~~through each respective upper opening of each buttress~~ said upper tube having at
5 least one cable inserted horizontally therein for retention below said first channel edge
6 and within said inwardly curved upper guide channel; and

7 a lower tube removably extended through said lower guide channel, ~~and~~
8 ~~through each respective lower opening of each buttress~~ said lower tube having at least
9 one cable extended horizontally therein for retention for retention below said second
10 channel edge and within said inwardly curved lower guide channel;

11 whereby upon an impact of a vehicle with one of said first or second side walls,
12 said upper tube and said lower tube are impacted with resulting destruction of said
13 upper tube and said lower tube with resulting distribution of impact energy along said
14 upper guide channel and said lower guide channel of said ~~of said~~ plurality of non-
15 vertical wall segments.

1 Claim 6 (Canceled).

1 Claim 7 (Currently amended). The protection barrier of Claim 1 wherein said
2 barrier is composed of polyethylene material of sufficient density for said barrier to be
3 substantially rigid, said barrier having an inlet for receipt of ballast into said chamber,

4 said inlet disposed through said top surface, and an outlet for release of ballast from
5 said interior chamber, said outlet disposed proximal of said base, whereby said
6 chamber is filled with ballast during stationary use to facilitate energy-absorbing and
7 retention in an upright position upon being impacted by a vehicle.

1 8. (Currently amended). A protection barrier comprising:

2 an elongated barrier defining a chamber therein, said barrier having a base, a
3 top surface, first and second side walls, and first and second ends; each of said first
4 and second side walls including:

5 a plurality of non-vertical wall segments connected end-to-end
6 collectively defining a side wall surface;

7 a plurality of buttresses extending vertically in spaced apart
8 locations along said side wall surface; and

9 a guide channel being inwardly curved in said side wall surface
10 of said first and second side walls, said guide channel being
11 horizontally disposed to extend between each one of said plurality of
12 buttresses, said guide channel positioned in horizontal alignment
13 with a similar sized guide channel on like-configured barriers;

14 ~~interconnection means extending vertically along each first and second ends,~~
15 ~~whereby said first and second ends are detachably interconnectable with like-~~
16 ~~configured interconnection means of either first and second ends of like-configured~~
17 ~~barriers~~

18 a coupling disposed on each opposed end of said barrier, each coupling being
19 like-configured for each opposed end thereby said coupling is releasably connectable
20 in juxtaposed end-to-end arrangement to either opposed end of like-configured
21 barriers;

22 said coupling including a tongue extended from each opposed end of said
23 barrier, said tongue extending vertically between said base and said top surface of said
24 barrier, said tongue extended from an off-center portion of each end;

25 a groove indentation in each opposed end, said groove extending vertically
26 between said base and said top surface of said barrier, said groove and said tongue
27 having one contiguous surface; and

28 each opposed end of said barrier having beveled corners providing for pivotable
29 movement of said tongue of a first barrier end relative to a second groove of a like-
30 configured second barrier end when said tongue of either end of said first barrier is
31 removably inserted into said second groove of either end of the like-configured second
32 barrier thereby forming an end-to-end aligned and nesting relationship of a plurality of
33 like-configured barriers.

1 Claim 9 (Currently amended). The protection barrier of Claim 8 further comprising:

2 an upper guide channel horizontally disposed along each side wall surface, said
3 upper guide channel forming an inwardly curved recess in said side wall surface;

4 a lower guide channel horizontally disposed along said side wall surface, said
5 lower channel forming a second inwardly curved recess spaced apart from said upper
6 guide channel in said side wall surface; and

7 each of said buttresses ~~having an upper opening and a lower opening~~
8 ~~therethrough, said upper openings being in horizontal alignment with said upper~~
9 ~~guide channel and said lower openings being in horizontal alignment with being~~
10 vertically extended from about said barrier base to about said barrier top surface,
11 whereby each of said buttresses intersect said upper guide channel and said lower
12 guide channel along said side wall surface of each first and second side wall;

13 whereby upon an impact of a vehicle with said first side wall or said second
14 side wall, each of said buttresses are impacted with distribution of impact energy
15 along said buttresses, said upper guide channel, said lower guide channel, and said
16 plurality of non-vertical wall segments of the impacted first or second side wall.

1 Claim 10 (Currently amended). The protection barrier of Claim 9 wherein said
2 elongated barrier is composed of polyethylene material having sufficient density for
3 said first and second side walls to be substantially rigid, said barrier having said base
4 wider than said top surface to facilitate retention in an upright position and further
5 having said interior chamber accessible for filling with ballast during stationary use to
6 facilitate energy-absorbing and retention in said upright position upon being impacted
7 by a vehicle.

1 Claims 11 - 16 (Canceled).

1 Claim 17 (Currently amended). The protection barrier of Claim ~~16~~ 10 wherein
2 said barrier having an inlet for receipt of ballast into said chamber, said inlet disposed
3 through said top surface, and an outlet for release of ballast from said ~~hollow~~ interior
4 chamber, said outlet disposed on said first side wall or said second side wall adjacent
5 said base, whereby said chamber is filled with ballast during stationary use.

1 Claims 18 - 22 (Canceled).

1 Claim 23 (Currently amended). The protection barrier ~~system~~ of Claim 22 17 ~~wherein~~
2 ~~said further comprising an~~ interconnection means including:

3 ~~a tongue extended from said first end, said tongue extending vertically along~~
4 ~~said first end between said base to said top surface of said barrier, said second end~~
5 ~~having a like configured tongue extended therefrom; and~~

6 ~~a groove indentation in each first end extending vertically along said first end~~
7 ~~between said base to said top surface of said barrier, said second end having a like-~~
8 ~~configured groove therein; and~~

9 a connector member having a keyhole slot therein, said connector member is
10 pivotably disposed on an end post extended from said barrier top surface proximal to
11 ~~either~~ each coupling disposed on opposed first and second ends of said barrier;

12 whereby said tongue of said first end of said barrier is removably inserted into
13 said groove indentation of either of a like-configured first and second end of a like-
14 configured second barrier, said connector member is removably disposed to retain said
15 tongue inserted in said groove indentation of either of the like-configured first and
16 second ends of the end-to-end nested arrangement of the plurality of like-configured
17 barriers.

1 Claims 24 - 27 (Canceled).

1 Claim 28 (Currently amended). The protection barrier ~~system~~ of Claim 26 5, further
2 including:

3 a first end member disposed proximal one end of the non-nested barrier ends of
4 the plurality of like-configured nested barriers, said end member having first and
5 second side walls aligned with each respective side wall of the adjacent nested barrier,
6 said end member having an outer curved end and an inwardly arcuate end including:

7 a tongue extended from said arcuate end, said tongue extending vertically
8 along said arcuate end; and

9 a groove indentation in said arcuate end, said groove indentation extending
10 vertically along said arcuate end;

11 whereby said tongue and said groove indentation of said first end member
12 are disposed to mate with respective groove indentation and tongue of one of
13 the non-nested barrier ends of the plurality of like-configured nested
14 barriers;

15 said first and second side walls including a plurality of non-vertical wall
16 segments disposed at heights comparable to said first and second side walls of the
17 plurality of like-configured nested barriers;

18 a like-configured second end member disposed proximal an opposed non-
19 nested barrier end of the plurality of like-configured nested barriers; and

20 each of said upper and lower cables extended through said upper and lower
21 guide channels of respective adjacent nested barriers are disposed to extend from said
22 first end member to said like-configured second end member, said upper and lower
23 cables extended along each first and second side wall of the plurality of like-configured
24 nested barriers.

1 Claims 29 - 30 (Canceled).

1 Claim 31 (New) A protection barrier comprising:

2 an elongated barrier defining a chamber therein, said barrier having first and
3 second side walls, a base and a top surface, said first side wall including side wall
4 surfaces having a plurality of non-vertical wall segments disposed thereon, said
5 second side wall including at least one non-vertical side wall surface;

6 a first guide channel inwardly curved in said side wall surfaces of said first side
7 wall, said guide being positioned in horizontal alignment with similar sized guide
8 channels on like-configured barriers;

9 a second guide channel inwardly curved in said first side wall, said
10 additional guide being positioned in horizontal alignment with said guide in
11 said first side wall;

12 said first side wall surfaces being substantially inwardly angled from said base
13 to said top surface, said second side wall having at least one side wall surface being
14 inwardly angled significantly greater than said inwardly angled first side wall surfaces;
15 and

16 a coupling disposed on each opposed end of said barrier, each coupling being
17 like-configured for releasably connecting either end of said barrier in juxtaposed end-
18 to-end arrangement with either end of like-configured barriers.

1 Claim 32 (New) The protection barrier of Claim 31, further comprising:

2 a plurality of buttresses spaced apart vertically along said first side wall;

3 said first and second guide channels forming respective inwardly curved and
4 horizontally aligned guide channels extended between said buttresses on said first
5 side wall; and

6 said second side wall lacking buttresses thereon, said second side wall having
7 at least one side wall surface being inwardly angled at between about eighty degrees to
8 about ninety degrees.

1 Claim 33 (New) The protection barrier of Claim 32 wherein said coupling disposed
2 on each opposed end of said barrier including:

3 a tongue extended from each opposed end of said barrier, said tongue extending
4 vertically between said base and said top surface of said barrier, said tongue extended
5 from an off-center portion of each end;

6 a groove indentation in each opposed end, said groove extending vertically
7 between said base to said top surface of said barrier, said groove and said tongue
8 having one contiguous surface; and

9 each opposed end of said barrier having beveled corners providing for pivotable
10 movement of said tongue of a first barrier end relative to a like-configured second
11 groove of a like-configured second barrier end, said tongue of either end of said first
12 barrier is removably inserted into said second groove of either end of the like-
13 configured second barrier in an end-to-end aligned and nested relationship of a
14 plurality of like-configured barriers oriented in a curved orientation.

1 Claim 34 (New) The protection barrier of Claim 33, further including:

2 a first end member disposed proximal of one end of the non-nested barrier ends
3 of the plurality of like-configured nested barriers, said end member having first and
4 second side walls aligned with each respective side wall of the adjacent nested barrier,
5 said end member having an outer curved end and an inwardly arcuate end including:

6 a tongue extended from said arcuate end, said tongue extending vertically
7 along said arcuate end; and

8 a groove indentation in said arcuate end, said groove indentation extending
9 vertically along said arcuate end;

10 whereby said tongue and said groove indentation of said first end member
11 are disposed to mate with respective groove indentation and tongue of one of
12 the non-nested barrier ends of the plurality of like-configured nested
13 barriers;

14 said first and second side walls of said first end member including a plurality of
15 non-vertical wall segments disposed at heights comparable to respective side walls of
16 the plurality of like-configured nested barriers;

17 an upper and lower guide channel disposed horizontally in each of said first
18 and second side walls of said first end member, said upper and lower guide channels
19 being spaced apart in horizontal alignment with similar sized guide channels on
20 respective side walls of the plurality of like-configured nested barriers;

21 a like-configured second end member disposed proximally against an opposed
22 non-nested barrier end of the plurality of like-configured nested barriers; and

23 an upper and a lower connector disposed to extend along each of said upper
24 and lower guide channels of said first end member, said upper and lower connectors
25 extended along each guide channel of respective side walls of the plurality of like-
26 configured nested barriers, whereby said upper and lower connectors encircle like
27 configured upper and lower guide channels of said like-configured second end
28 member, thereby maintaining end-to-end alignment and nesting relationship
29 therebetween of the plurality of like-configured barriers when at least one of said
30 barriers are impacted by a vehicle.